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ABSTRACT

This final report describes the activities and outcomes of a University of Northern Colorado project designed to enhance programs for preparing teachers to work with students with sensory impairments from linguistically diverse backgrounds. Project accomplishments included: (1) financially supporting 18 trainees who were pursuing a graduate degree in 1 of the 3 low-incidence programs at the University of Northern Colorado (hearing, vision, or multiple disabilities); (2) developing a course that introduced issues related to the educational needs of students with low-incidence disabilities who come from multicultural communities; (3) infusing competencies addressing the needs of linguistically diverse students with low-incidence disabilities within existing courses; (4) targeting recruiting efforts to attract qualified bilingual trainees, or trainees interested in developing second language competences and teaching students from non-English speaking communities; (5) conducting a multi-state needs assessment of current practices and competencies needed by teachers working with linguistically diverse students with low-incidence disabilities; (6) supplementing a resource library with assessments and instructional materials designed for linguistically diverse students; and (7) establishing an advisory committee to guide the project in achieving its goals. An appendix contains a survey from the needs assessment. (CR)

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Final Report

Award Number H029A60014

Preparing Special Educators to Meet the Needs of
Linguistically Diverse Students with Disabilities



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March 2002

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Preparing Special Educators to Meet the Needs of Linguistically Diverse Students with Disabilities

The University of Northern Colorado, recognizing the shortage of teachers available to work with students with sensory impairments, submitted a proposal to receive federal support to enhance its programs (vision/orientation & mobility, hearing, and multiple disabilities program) by developing and expanding coursework and content specifically related to the needs of linguistically diverse students with disabilities. To original objectives of the project included:

1. Provide financial support to 30 trainees pursuing graduate degrees in one of our three low incidence programs over a three-year period;
2. Introduce a new course addressing assessment and instructional needs of students who come from non-English speaking homes and have disabilities;
3. Infuse competencies addressing the needs of linguistically diverse students with low incidence disabilities within our existing courses;
4. Target recruitment efforts to attract qualified bilingual trainees, or trainees who are interested in developing competencies in a second language and in teaching students who come from non-English speaking communities;
5. Conduct a multi-state needs assessment of current practices and competencies needed by teachers working with students with disabilities who come from homes where a language other than English is spoken;
6. Supplement our Resource Library with assessments and instructional materials designed for linguistically diverse students so that our trainees become competent in using these materials in their future teaching positions; and
7. Establish an Advisory Committee to guide the project in achieving its goals.

Most of the existing Bilingual Special Education Teacher Training Programs focus on the needs of students within the high incidence disability areas. Moreover, the research literature in Special Education tends to concentrate on the needs of linguistically diverse learners with learning, mild cognitive disabilities, and behavior problems. Consequently, less attention has been given to the needs of students with sensory impairments and multiple disabilities who enter school without a working knowledge of English. This project addressed the needs of a group of students that, for the most part, have been neglected.

Project Accomplishments

To describe the overall outcomes of the project at its completion, information related to specific project objectives will be provided. Although all objectives were met, the project was least successful in attracting bilingual trainees, however, some trainees developed competencies in a second language and all trainees developed competencies in teaching students who come from homes where a language other than English is spoken.

Outcomes of Individual Objectives

Objective #1

Provide financial support to 30 trainees pursuing graduate degrees in one of our three low-incidence programs over a three-year period.

One of the objectives of this project was to financially support 30 trainees who were pursuing a graduate degree in one of the three low-incidence programs at the University of Northern Colorado: Hearing, Vision, or Multiple Disabilities emphasis. A total of 37 applications were received for consideration to the grant project, and 27 students were admitted to the program and were financially supported. Some of the reasons for rejection included: incomplete applications; students lacking admission in one of the three low-incidence programs; or trainees not agreeing to add 11 credits to their graduate program as required by the project. Of those admitted, seven were pursuing their M.A. in visual impairments, four in hearing impairments, and 16 students had been admitted to the multiple disabilities program.

At the end of the project, 18 trainees had completed their Master of Education in Special Education. Seven trainees completed the vision program, two completed the hearing program and nine completed the multiple disabilities program. Nine students had not completed their program at the end of the project. Of those not completing their program, 3 discontinued their studies and 6 delayed the completion of their program due to professional, family, or health reasons. Those delaying completion of the program plan to return to the university as soon as they are able to continue with their graduate studies.

Objective #2

Introduce a new course addressing assessment and instructional needs of students who come from non-English speaking homes and have low-incidence disabilities.

The course was developed as a pilot course in the Spring of 1997 and was first delivered in the Fall of 1997. The pilot course enrolled eleven students and it generated enough interest that it was revised and submitted for University approval. The course has now become a regular offering and it has been delivered both on campus and through Distance Education. When offered, the course enrolls between ten to thirteen students from the three low-incidence programs. Following is an example of the course syllabus:

Course Title: Linguistically Diverse Students with Low Incidence Disabilities (2 credits)

Course Description:

The purpose of this course is to introduce issues related to the educational needs of students with low-incidence disabilities who come from multicultural communities. It examines legal mandates, assessment, and best teaching practices related to the population of students who have sensory impairments and belong to an ethnic minority group. It explores second language acquisition and the models used in the U.S. to teach students who enter school speaking a language other than English.

Students Objectives:

1. Become familiar with the needs of students with low incidence disabilities who come from multicultural communities.
2. Identify approaches of language teaching and examine their use with second language students with low incidence disabilities
3. Identify cultural variables that influence instruction, assessment, and family- school relationships.
4. Examine assessment concerns for this population of students.
5. Examine effective teaching strategies to improve the education of students who are in the process of learning English as a second language.
6. Develop skills in transcribing materials into Spanish Braille for students in the Vision Program.
7. Examine how families from culturally diverse communities view and interact with schools and educators.

Broad Content Outline:

1. Definition and incidence of language minority students, students in the process of learning English. Educational needs of students with different levels of English and native language fluency.
2. Bilingual education: What is it? How is it implemented? What is the role of the special education teacher who provides services to students who attend bilingual classrooms?
3. Fostering writing, reading, oral and listening skills in English and the non-English language. Implications for students who use Braille as a reading and writing mode.
4. Learning to speak, read, and write in a second language. Social and individual factors influencing the learning of the second language.
5. Research on issues related to the education of language minority students with disabilities.
6. Availability and appropriateness of available commercial materials for students who are in the process of learning English and use large print or Braille as their reading and writing mode.

Required Readings:

- Harry, B. , Kalyanpur, M. , & Day, M. (1999) Building cultural reciprocity with families: Case studies in special education. Baltimore: Paul H. Brookes Publishing Co.
- Lessow-Hurley, J. (2000). The foundations of dual language instruction. White Plains: NY. Longman.

Recommended Readings for Students in the Vision Program:

- Bau, A. M. (1999). Providing culturally competent services to visually impaired person. Journal of Visual Impairment & Blindness, 93(5), 291-297.
- Comité Internacional Pro Ciegos (nd). Manual de Enseñanza de escritura y lectura Braille. Mexico City. Author.
- Conroy, P. (1999). Total physical response: An instructional strategy for ssecond language learners who are visually impaired. Journal of Visual Impairment and Blindness, 93, 315-318.
- Guinan, H. (1997). ESL for students with visual impairments. Journal of Visual Impairment & Blindness, 91(6), 555-563.
- Library of Congress (1990). World Braille Usage. Washington, D.C.: Author.

Milian, M. (1996). Knowledge of basic concepts of young students with visual impairments who are monolingual or bilingual. Journal of Visual Impairment and Blindness, 90(5), 386-399.

Milian, M. (1997). Teaching braille reading and writing to students who speak English as a second language. In D. Wormsley and F. M. D'Andrea (Eds.). Instructional strategies for braille literacy (pp. 189-226). New York: American Foundation for the Blind.

Milian, M. (1999). School and family involvement: Attitudes among Latinos who have children with visual impairments. Journal of Visual Impairment and Blindness, 93(5), 277-290.

Milian, M., & Erin, J. (2001). Diversity and visual impairment: The influence of race, gender, religion, and ethnicity on the individual. Chapters 2-6 and Chapter 12. New York: American Foundation for the Blind.

Milian, M. (2001). Schools' efforts to involve Latino families of students with visual impairments. Journal of Visual Impairment and Blindness, 95(7), 389-402.

Recommended Readings for Students in the Deaf and Hard of Hearing Program:

Ahmad, W.I U. (1998). Deafness and ethnicity: Services, policy and politics. Bristol: Policy Press.

Christensen, K., & Delgado, G. (2000). Deaf plus: A multicultural perspective. San Diego: DawnSign Press.

Gerner de Garcia, B. A. (1995). ESL applications for Hispanic deaf students. Bilingual Research Journal, 19(3-4), 453-467.

Grant, J. (1993). Hearing-impaired children from Mexican-American homes. Volta Review, 95(5), 131-135.

Mapp, I., & Hudson, R. (1997). Stress and coping among African American and Hispanic parents of deaf children. American Annals of the Deaf, 142(1), 48-56.

Rodriguez, O., & Santiviago, M. (1991). Hispanic deaf adolescents: A multicultural minority. Volta Review, 93(5), 89-97.

Walker-Vann, C. (1998). Profiling Hispanic deaf students: A first step toward solving the greater problem. American Annals of the Deaf, 143(1), 46-54.

Other Related Readings:

Articles:

Barrera, I. (1993). Effective and appropriate instruction for all children: The challenge of cultural/linguistic diversity and young children with special needs. Topics in Early Childhood Special Education, 13(4), 461-487.

Cheng, L. L. (1987). The identification of communicative disorders in Asian-Pacific students. Journal of Childhood Communication Disorders, 13(1), 113-119.

Correa, V. & Tulbert, B. (1991). Teaching culturally diverse students. Preventing School Failure, 35(3), 20-35.

ERIC/OSEP Abstract 23, 1989. Assessing the language difficulties of Hispanic bilingual students. The Council for Exceptional Children.

Gersten, R., & Woodward, J. (1994). The language-minority student and special education: Issues, trends, and paradoxes. Exceptional Children, 60(4), 310-322.

Harris, K. , Rueda, R. , & Supancheck, P. (1990). A descriptive study of literacy events in secondary special education programs in linguistically diverse schools. Remedial and Special Education, 2(4), 20-28.

Harry, B., Grenot-Scheyer, M., Smith-Lewis, M., Park, H. S., Xin, F., & Schwartz, I. (1995). Developing culturally inclusive services for individuals with severe disabilities. JASH, 20(2), 99-109.

Maldonado-Colón, E. (1991). Development of second language learners' linguistic and cognitive abilities. The Journal of Educational Issues of Language Minority Students, (9), 37-48.

Schiff-Myers, N. B, Djukic, J., McGovern-Lawler, J., & Perez, D. (1993). Assessment considerations in the evaluation of second-language learners: A Case Study. Exceptional Children, 60(3), 237-248.

Books or Chapters:

Artiles, J. A. & Zamora-Durán, G. (1997). Reducing disproportionate representation of culturally diverse students in special and gifted education. Reston, VA: Council for Exceptional Children.

Baca, L., & Cervantes, H. (1998). The bilingual special education interface (3rd ed.). Columbus, OH: Merrill Publishing Company.

Benham, M. K. P. , & Heck, R. H. (1998). Culture and educational policy in Hawai'i: The silencing of native voices. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Ford, B. A. (2000). Multiple voices for ethnically diverse exceptional learners.

Reston, VA: Council for Exceptional Children.

Hamayan, E. , & Damico, J. (Eds.). (1991). Limiting bias in the assessment of bilingual students. Austin, TX: PRO-ED.

Langdon, H. W. & Cheng, L. L. (Eds.) (1992). Hispanic children and adults with communication disorders. Gaithersburg, Maryland: Aspen Publication.

Robins, K. N., Lindsey, R. B., Lindsey, D. B., & Terrell, R. D. (2001). Culturally proficient instruction: A guide for people who teach. Thousand Oaks, CA: Corwin Press.

Spangenberg-Urbschat, K. & Pritchard, R (1994). Kids come in all languages: Reading instruction for ESL students. Newark, Delaware: International Reading Association.

Course Requirements:

1. Listserve participation is expected from all students enrolled in the course.
2. Transcription of Spanish Braille materials. Only for students in the Vision Program who have taken Braille I. You can either turn in each assignment individually, or turn them in all together. All students in the vision program are required to complete this assignment. Please mail or bring your assignment using “real” braille rather than simulated braille. 40 points

Following, you will find a menu of activities that are either worth 40 or 20 points. You are required to select a number of activities that will add up to 100 points. However, you are required to select at least one activity that is worth 40 points. Since students in the vision program are already required to complete the Spanish Braille transcription which is worth 40 points, they may select the rest of their activities from the 20 point menu. When you turn in your activity, please specify its number and how much is it worth.

3. Read four articles related to the field of bilingual education, bilingual special education, English as a Second Language, or multicultural education. Using APA style, write an annotated bibliography summarizing each one of the articles. The summary should also include your reaction to the information provided by the author(s) and how the information you learned could help you when working with students with low incidence disabilities. Submit an eight to ten page double spaced type-written paper with the summary of the four articles, your reactions to the information, and how you will use this information

as a future teacher of students with a low incidence disability. Also share a copy of each article with your instructor. (40 points)

4. Write a 10 page paper specific to the language and cultural concerns encountered by educators when teaching students who come from a different cultural and/or language background. The paper should cover general concerns as well as those more specific to the population of students you work with. (40 points)

5. Write an annotated bibliography containing at least 15 sources related to one topic or any of the topics covered in class. Use APA style to cite the article and write a two paragraph description of each article and how it may relate to your future work with students from a low incidence disability group. (40 points)

6. Interview three individuals with sensory impairments who have learned English as a second or foreign language. Write the summary of your interviews analyzing the following factors: Age when learning English or the foreign language; education in primary language; difficulties experienced in the English or foreign language class; type of education received in native country; level of English proficiency obtained; type of instruction received; type of helpful strategies; goals for learning English or the foreign language; and outcome in learning language as perceived by person interviewed. (40 points)

7. Interview three teachers/instructors who have taught a second language to students with sensory impairments. Ask about the situation, helpful strategies, barriers to instruction, and any other factors that you may be wondering about when teaching either English as a second language or any other language to students with a low incidence disability. (40 points)

8. Locate a book for children written in Spanish. If you are in the Vision Program, transcribe it in braille and develop three interdisciplinary lessons based on the content of the book as your guide. If you are not in the vision program, then develop five interdisciplinary lessons. This assignment assumes that you are fluent in Spanish and that you will be teaching these lessons to a child whose native language is Spanish or is learning Spanish as a second language. (40 points)

9. Partner Project. In a group of two, develop a list of suggestions that you could share with the teachers in your school district about working with students with a low incidence disability who come from a culturally or linguistically diverse community. Some ideas may be: A list of suggestions for special education teachers who work with ESL students with low incidence disabilities; a list of suggestions for ESL teachers who work with students with low incidence disabilities; a list of suggestions for parents written in a language other than English; or a list of suggestions for educators about a particular group

of diverse students based on ethnicity, race, or religion. Please include your references as part of your list of suggestions. (20 points)

10. Identify at least 5 websites that specifically address some of the topics covered in class. Write the website address, a description of it, and at least one sample of the information it offers. (20 points)

11. Create a list of multicultural children's literature. Include at least 10 titles and describe the topic of the book, publisher, year of publication, the age level appropriate for, the group the book refers to, and if the book is available in braille. If available in braille, please include where it is available from. For the purpose of this assignment you can include books that are written for children with disabilities as a category of multicultural books. (20 points)

Evaluation/Grading:

100-90%	=A
89-80%	=B
79-70%	=C
69-60%	=D
Below 60%	=F

Objective #3

Infuse competencies addressing the needs of linguistically diverse students with low-incidence disabilities within our existing courses.

Although the development of a specialized course was an important addition that served as a vehicle to new learning for those enrolled in one of the three low-incidence programs, the infusion of new competencies in existing courses was also an essential component of this project. The integration of competencies within existing courses provided additional opportunities to further explore and discuss areas that are relevant to the education of linguistically diverse students and their family members.

The first step taken to develop new competencies took place at a meeting of the Advisory Committee. Course syllabi were distributed at a meeting and three small focus groups were created one for each of the low-incidence programs. Advisory committee members joined the group they could contribute to the most depending on their professional training, personal experience, or interest. By the end of the meeting, a long list of competencies had been generated that could be easily infuse into the different courses in each program.

The second step taken to develop new competencies took place through a national survey that was sent to administrators of low incidence programs. In addition to a number

of demographic and rating questions, administrators were also asked to contribute competencies that they believed to be important for teachers who worked with students with vision, hearing, or multiple disabilities who were also members of non-English speaking or multicultural groups.

In addition, a prior study conducted by Milian and Ferrell (1998) provided a number of teacher competencies specific to the needs of linguistically diverse students with visual impairments: The results of these efforts culminated on the development of a list of competencies that were shared with faculty members in the three low-incidence programs. Individual faculty members determined which competencies were appropriate to include in the courses they taught.

Teacher Competencies to Meet the Needs of Linguistically Diverse Learners with Low Incidence Disabilities

- 1) Demonstrate an understanding of bilingual models of education and how they can be used to facilitate learning for students with low incidence disabilities.
- 2) Develop an awareness of how family members and individuals with disabilities from multicultural communities interpret, deal, and accept disabilities.
- 3) Understand how different cultural beliefs impact upon medical, educational, and programming decisions.
- 4) Understand the development of second language acquisition.
- 5) Demonstrate understanding of different child-rearing practices how they impact upon educational goals.
- 6) Understand how family members from different cultural groups view their roles as it relates to the school and the student's educational program.
- 7) Knowledge of how to adapt materials to meet not just the physical needs but also the language (1st and 2nd) needs of students.
- 8) Demonstrate understanding of culturally appropriate materials and activities.
- 9) Explore personal attitudes regarding culturally and linguistically diverse individuals.
- 10) Understand the differences in various cultures regarding the acquisition of independent living skills.
- 11) Understand how social and recreation skills may differ in content and importance among various cultures.
- 12) Explore how different cultural groups may perceive the use of discipline rules.
- 13) Explore cultural, religious, and spiritual beliefs as coping resources.
- 14) Understand issues of transition from school to work, and how culturally diverse families may view the process.

- 15) Understand the medical, educational, and economic needs of families of students with low incidence disabilities who come from linguistically diverse communities.
- 16) Identify program modifications necessary when providing educational services to students with limited knowledge of English.
- 17) Demonstrate familiarity with assessment instruments that are available in non-English languages.
- 18) Adapt commercially available assessments and develop strategies for assessing students who are learning English as a new language.
- 19) Understand informal and authentic assessment strategies and their use with students with low incidence disabilities who come from multicultural and/or non-English speaking communities.
- 20) Understand the advantages and disadvantages of using interpreters when communicating with non-English speaking families.
- 21) Discuss strategies for communicating with non-English speaking families.
- 22) Identify available software to facilitate the teaching of English.
- 23) Identify available software to support the teaching of languages other than English.
- 24) Review and evaluate English as a second-language materials and those written in non-English languages and determine their use with second language learners with low incidence disabilities.

Objective #4

Target recruitment efforts to attract qualified bilingual trainees, or trainees who are interested in developing competencies in a second language and in teaching students who come from non-English speaking communities.

In order to meet this objective we conducted a number of activities, many of which were specifically targeted to the recruitment of students from minority groups. Following is a list of some of the activities we conducted:

Example of Activities Conducted

- Developed program flyer and project application.
- Submitted project announcement to UNC's students newspaper The Mirror.
- Mailed project information to all Special Education District coordinators in Colorado.
- Mailed project information to Special Education Vision programs in the Mid-west and the western part of the United States, and Schools for Deaf and Blind.

- Sent information about project to Directors of Cultural Centers, Teacher Preparation Program Coordinators, faculty members in all undergraduate teacher preparation programs, and faculty members in Hispanic Studies and Afrikana Studies.
- Distributed flyers in all EDSE 500: Introduction to Special Education courses.
- Sent information to ESL and Bilingual Coordinators in Weld County schools.
- Mailed information to Universities with high Hispanic enrollment in the western part of the United States.
- Distributed program flyers at the Symposium on Culturally and Linguistically Diverse Exceptional Learners in New Orleans.
- Published information on Native American Student Services Newsletter.
- Submitted information to the Colorado Vision Service providers newsletter.
- Distributed information at the UNC Information table at the National CEC Conference in Salt Lake City, Utah.
- Shared information at the Native American Caucus in Salt Lake City, Utah
- Distributed program flyers at Special Education Conferences in Hawaii and Colorado Springs.
- Announced grant opportunity in Division of Special Education website.
- Provided program flyers to the UNC Graduate School Dean to distribute at recruitment events for UNC.
- Distributed flyers at the Special Education SIG at the National Association for Bilingual Education in Dallas, Texas.

At the completion of the project, we had supported three Hispanics, one African American, and one Native American student. In terms of bilingual skills, three students were Spanish/English bilinguals and two took Spanish courses as part of their requirements for the project. All students funded as part of the project completed additional course work dealing with the needs of linguistically diverse students. Courses that met the additional credit requirements included EDLD 602: Teaching Linguistically Diverse Learners, EDEL 619: Pluralism in Education, EDLD 603: Methods and Assessment in Bilingual/ESL Education and the new course developed for this project EDSE 528: Linguistically Diverse Students with Low Incidence Disabilities.

Objective #5

Conduct a multi-state needs assessment of current practices and competencies needed by teachers working with students with low-incidence disabilities who come from homes where a language other than English is spoken.

To meet this objective a survey was developed to investigate the opinions of administrators related to the competencies they viewed to be essential for teachers to effectively teach students with low-incidence disabilities who come from multicultural communities. The survey, titled "Students with Sensory Impairments from Multicultural Communities: Administrators' Views on Teacher Competencies" (see Appendix A for survey) was completed by 107 school administrators in 42 states. The questions were specifically designed to explore educational concerns related to students with sensory impairments (visually impaired, hearing impaired, and deafblind) who are members of culturally and linguistically diverse groups. Thirty-eight respondents identified their programs as primarily educating students who are deaf or hearing impairments, 32 programs were responsible for primarily providing educational services to blind or visually impaired students, and 37 programs were responsible for educating both group of students. It is expected that the information learned through this survey will assist teacher educators in programs for students with sensory impairments to incorporate competencies into their programs that also address the education of students from multicultural communities.

The information is presented in three parts. First, data related to programs, students, and teachers will be provided. Second, the ratings of individual competencies will be provided to show how administrators rated the importance 15 given items. Finally, comments shared by administrators will be provided by clustering them in categories.

Part I

Respondents described their schools or programs as:

Public school program	51	(47.7%)
School for the Deaf (Residential/Special Day School)	28	(26.2%)
School for the Blind (Residential/Special Day School)	16	(15%)
School for the Deaf and the Blind (Residential/Special Day School)	5	(4.7%)
Private non-profit program or agency	3	(2.8%)
State Special Day School	2	(1.9%)
Other, please explain	2	(1.9%)

Respondents described their position as:

Special Education Administrators (Director/Coordinator)	40	(37.3%)
Superintendents	18	(16.8%)
Principal/Assistant Principals	17	(15.8%)
Director Student Services	13	(12.1%)
Teacher for the Visually Impaired	10	(9.3%)
Coordinator Low Incidence	8	(7.4%)
ESL Coordinator	1	(.9%)

Number of students enrolled in programs:

Total number of student enrolled (both with and without disabilities)	751,268
Total number of students who have only a visual impairment:	2,280
Total number of students who have visual/multiple disabilities:	2,892
Total number of students who are only deaf or hard of hearing:	5,862
Total number of students who are deaf or hard of hearing and have other disabilities:	2,109
Total number of students who are deafblind:	317
Total number of students with sensory impairments:	13,460 (1.7% of total)

Reported percentage of students with sensory impairments by race and ethnicity by major categories*:

African Americans:	17.1%
American Indians:	1.3%
Asian Americans:	3.5%
Caucasians:	54.1%
Latino/a:	22.6%

*Missing numbers indicate either "other" or "mixed race/ethnicity"

Number of students with sensory impairments who come from homes where English or American Sign Language (ASL) are not the primary languages (i.e., Spanish, Chinese, Russian, etc.).

Number of students: 2,140 (15.9% of students with sensory impairments)

Number of programs that offer English as a Second Language services to students with sensory impairments:

Yes: 40 programs (37.4% of programs)

No: 61 programs (57% of programs).

Number of students with sensory impairments receiving English as a Second Language (ESL) services:

Number of students: 1,449 (10.7% of students with sensory impairments)

Personnel providing ESL services for students with sensory impairments by number:

Certified ESL teacher: 33

Paraprofessional: 18

Special education teacher 21

Speech and language therapist 14

Other: 5

Volunteers: 2

Number of teachers employed to specifically work with students with sensory impairments:

Number of teachers: 2,774

**Percentage of race and ethnicity of teachers:
Reported number 2,596 teachers**

African Americans: 6.7%

American Indians: .3%

Asian Americans: 1.9%

Caucasians: 88.9%

Hispanic Americans: 1.7%

Mixed Race/Ethnicity: .4%

Other: .1%

Part II. Ratings of Competencies

Respondents were asked to rate each competency using a scale ranging from 1 (Not Important) to 5 (Extremely Important). There was also an option for respondents to indicate if they did not know.

Competency	Total	Gr. I	Gr. II	Gr. III
Concepts of learning a second language.	3.67	3.94	3.13	3.83
Exposure to the concept of multicultural education.	3.75	4.21	3.48	3.50
Effective teaching strategies for this population.	4.18	4.51	3.61	4.32
Familiarity with assessment issues related to this population of students.	4.07	4.18	3.54	4.40
Curriculum modifications and adaptations necessary to promote effective teaching.	4.32	4.45	3.90	4.54
Understanding of ESL teaching strategies.	3.46	3.54	3.03	3.75
Cultural perceptions of disability.	4.01	4.24	3.83	3.94
Strategies for working with families from multicultural groups.	3.96	4.16	3.82	3.86
Understanding of bilingual education models.	3.09	3.45	2.74	3.02
Understanding the differences between a language disability and the normal process of second language acquisition.	4.14	4.37	3.67	4.29
Understanding of the cultures of students in the program.	3.93	4.29	3.77	3.70
Integrating the culture of students into the curriculum.	3.65	4.13	3.32	3.45
Familiarity with alternative assessment procedures for this population.	3.96	4.24	3.54	4.02
Developing I.E.P's that reflect the culture and language of students.	3.78	4.21	3.35	3.70
Fluency in the home language of students and families.	2.83	2.97	2.48	3.00

Total=The mean of the entire group.

Gr. I=Hearing Impaired Programs Gr. II=Visually Impaired Programs

Gr. III=Programs that provide services to students from both groups

In addition to comparing the means of each item according to the primary disability area represented by each program, a one-way ANOVA was conducted to determine if the differences found in the means were statistically significant. Comparisons were made among three groups: Group I-administrators who worked in programs that primarily educate students with hearing impairments; Group II-administrators who worked in programs that primarily educate students with visual impairments; and Group III-administrators who worked in programs that educate students from each of the disability groups. As can be observed from the ratings provided by the administrators, fourteen of the fifteen items were considered to be at least important, and one item "Fluency in the home language of students and families" was rated to be less than important. In general, administrators who work for programs that educate students who are deaf or hard of hearing rated many of the stated competencies higher than the other two groups. Conversely, administrators of programs that provide services to students with visual impairments rated many of the stated competencies lower than the other two groups. Significant differences were found in eight of the fifteen competencies. The results of the Scheffe test that were found to have significant differences are as follows:

Competencies and results of Scheffe significance test

- 1. Exposure to the concept of multicultural education.** The mean of administrators working in programs with students who had hearing impairments was significantly higher than those of administrators working with the other two groups.
- 2. Effective teaching strategies for this population.** The mean of administrators working in programs with students who had hearing impairments and the mean of administrators working in programs that provided services to groups of students with each one of the sensory impairments were significantly higher than the mean of administrators who worked in programs which primarily provided services to students with visual impairments only.
- 3. Familiarity with assessment issues related to this population of students.** The mean of administrators working in programs that provided services to groups of students with each one of the sensory impairments were significantly higher than the mean of administrators who worked in programs which primarily provided services to students with visual impairments only.
- 4. Curriculum modifications and adaptations necessary to promote effective teaching.** The mean of administrators working in programs that provided services to groups of students with each one of the sensory impairments were significantly higher than

the mean of administrators who worked in programs which primarily provided services to students with visual impairments only.

5. Understanding the differences between a language disability and the normal process of second language acquisition. The mean of administrators working in programs that primarily provided services to students with hearing impairments was significantly different from the mean of administrators who worked in programs that primarily educated students with visual impairments.

6. Understanding of the cultures of students in the program. The mean of administrators working in programs that primarily provided services to students with hearing impairments was significantly different from the mean of administrators who worked in programs that provided services to groups of students with each one of the sensory impairments.

7. Integrating the culture of students into the curriculum. The mean of administrators working in programs which primarily educated students who had hearing impairments was significantly higher than those of administrators who worked with the other two groups.

8. Developing I.E.P's that reflect the culture and language of students. The mean of administrators working in programs that primarily provided services to students with hearing impairments was significantly higher than the mean of administrators who worked in programs that primarily educated students with visual impairments.

Part III. Comments Provided by Administrators

Administrators were asked to provide additional ideas as to the knowledge and skills they believed that teachers should have when working with students with sensory impairments who come from multicultural environments. The following categories were generated from the answers provided by those who responded to the survey. Sample statements are provided so that the reader gets a better understanding of the type of ideas respondents suggested:

1. Knowledge about Culture:

- "It would be beneficial if teachers could have some information regarding beliefs and unique customs of certain cultures."
- "Understanding of culture and expectations of families."
- "Understanding of cultural differences between student's culture, school's culture and family's culture."

- "Awareness of culture biases in textbooks and on assessments. Familiarity with the students' culture."

2. Knowledge about resources (both people and materials).

- "Teachers need to know the resources (consultants) that are available in the school or district, the area, and the state."
- "Teachers need to know how to get assistance to communicate with families."
- "Knowledge and access to resources within the school district to assist, through consultation or collaboration, them with such activities as assessment, curriculum modifications, and understanding of culture and expectations of families."
- "Ways of accessing and communicating with groups/agencies in the community that can provide additional resources in many ways: providing good role models, providing ways of tapping into grants, providing ways of accessing current knowledge, etc."

3. Skills Related to Communication with Families.

- "Creativity, patience, determination, comfort in communicating with families."
- "Skills in providing information to families."
- "Parent's wishes for activities of daily living instruction."
- "Need strong school home partnerships."
- "Understanding home attitudes toward education and toward authority."

4. Skills Related to the Delivery of Instruction

- "Teaching of strategies to promote learning of basic skills."
- "Skills in assistive technology, functional curriculum, total communication, community based instruction, and networking with agencies."
- "Good listening skills, communication skills, adaptive skills."
- "Knowledge of classroom techniques and expectations of the mainstream Classroom teacher."

Additionally, administrators also included cultural perceptions of disability, understanding of how English is taught, ability to work with students with multiple disabilities, and use of interpreters as important skills teachers should have.

Objective #6

Supplement our Resource Library with assessments and instructional materials designed for linguistically diverse students so that our trainees become competent in using these materials in their future teaching positions.

This project objective proved to be very useful not only for our trainees, but also for teachers in our local school district. Materials purchased through this project have been shared with faculty members to use in their courses, with students to use in their practicum assignments and with teachers in our surrounding school districts to use in their classrooms. During the third year of the grant, the materials purchased from this project were placed in the Bilingual/ESL Resource Library located in the Education Building. The materials found in the Bilingual/ESL Resource Library were funded through a Title VII Grant aimed at training bilingual teachers. The University of Northern Colorado provides the physical space for the library. The materials from both grants are available to faculty, special education trainees, bilingual trainees, and local school district personnel.

In order to make the materials accessible to all who may need to use them, a list of materials housed in the Library has been published in the Bilingual Education and English as a Second Language Program Website. The website address is: www.coe.unco.edu/bilingual. Materials can be borrowed for up to a month and need to be returned prior to the end of the semester.

As previously mentioned, this objective has been much more successful than anticipated when the idea was conceptualized and has benefited a larger audience than expected.

Objective #7

Establish an Advisory Committee to guide the project in achieving its goals.

The Advisory Committee was established during the first year of the project and was instrumental in guiding the Project Director in developing many of the competencies that have been added to the program. Advisory committee members also provided ideas as to the population to focus on for the needs assessments and the distribution of the survey. Committee members included: Jorge Garcia, Weld County BOCES ESL/Bilingual Coordinator and now President of the National Association of Bilingual Education

(NABE); J. Greeley, teacher and coordinator of the Anchor Preschool Center for children with visual impairments in Denver, Colorado; Mary Hattick, technology coordinator at the Colorado School for the Deaf; Mike McCarthy, Outreach Coordinator of services for students who are deaf or hard of hearing in Colorado; Nancy Sall from St. Lukes' Hospital in New York City; Diana Vasques, a mother of a deaf young man; Lewis Jackson, Coordinator of Profound Needs Program at the University of Northern Colorado; and Eva Kenny, Program Graduate Assistance and Doctoral Student at UNC.

References

Milian, M., & Ferrell, K. A. (1998). Preparing special educator to meet the needs of students who are learning English as a second language and are visually impaired: A monograph. ERIC Document NO. ED 426 545.

Appendix A

**Students with Sensory Impairments from
Multicultural Communities: Administrators' Views on
Teacher Competencies**

A Survey of Administrators

Madeline Milian, Ed.D.

University of Northern Colorado

Directions: Please mark (x) the item(s) to indicate the correct answer.

Please tell us about your school program and students

1. Your school or program can be best described as:

- School for the Blind (Residential/Special Day School)
- School for the Deaf (Residential/Special Day School)
- School for the Deaf and the Blind (Residential/Special Day School)
- Public school program
- State Special Day School
- Private non-profit program or agency
- Other, please explain _____

2. What is the title of your position? _____

3. Please tell us about the students in your school or program:

Total number of students enrolled in school or program: _____

Total number of students who have **only** a visual impairment _____

Total number of students who have visual/multiple disabilities _____

Total number of students who are **only** deaf or hard of hearing _____

Total number of students who are deaf or hard of hearing and have other disabilities _____

Total number of students who are deafblind _____

4. Please indicate the number of students with low incidence disabilities in your school or program who belong to the following racial and ethnic categories:

African Americans _____

Hispanic Americans _____

American Indians _____

Mixed Race/Ethnicity _____

Asian Americans _____

Other _____

Caucasians _____

5. Please indicate the number of students with low incidence disabilities who come from homes where English or American Sign Language (ASL) are not the primary languages (i.e., Spanish, Chinese, Russian, etc.).

Number of students _____

6. Do students with low incidence disabilities receive English as a Second Language (ESL) services in your school or program?

Yes No

If yes, how many students with low incidence disabilities receive English as a Second Language instruction?

Number of students _____

7. Who provides the English as a Second Language (ESL) services for students with low incidence disabilities? Check all that apply.

- Certified ESL teacher
- Paraprofessional
- Special education teacher
- Speech and language therapist
- Volunteers
- Other, please explain _____

Please tell us about your teachers

8. How many teachers are employed to specifically work with students with vision, hearing, and multiple disabilities?

Number of teachers _____

9. Using the numbers reported in item 8, please indicate the number of teachers who belong to the following racial and ethnic groups:

- | | |
|-------------------------|----------------------------|
| African Americans _____ | Hispanic Americans _____ |
| American Indians _____ | Mixed Race/Ethnicity _____ |
| Asian Americans _____ | Other _____ |
| Caucasians _____ | |

Please rate the level of importance of the following items as they relate to teachers of students who have visual, hearing, or multiple disabilities who come from multicultural groups including those who come from homes where languages other than English and ASL are used.

Using a scale ranging from Not Important (1) to Extremely Important (5) and DK to indicate "Don't Know," circle the number you feel will best describe the importance of each knowledge or skill.

Knowledge or Skills	Don't know	Not important	1	2	3	4	5	Extremely Important
Concepts of learning a second language.	DK	1	2	3	4	5		
Exposure to the concept of multicultural education.	DK	1	2	3	4	5		
Effective teaching strategies for this population.	DK	1	2	3	4	5		
Familiarity with assessment issues related to this population of students.	DK	1	2	3	4	5		
Curriculum modifications and adaptations necessary to promote effective teaching.	DK	1	2	3	4	5		
Understanding ESL teaching strategies.	DK	1	2	3	4	5		
Cultural perceptions of disability.	DK	1	2	3	4	5		
Strategies for working with families from multicultural groups.	DK	1	2	3	4	5		
Understanding of bilingual education models.	DK	1	2	3	4	5		
Understanding the differences between a language disability and the normal process of second language acquisition.	DK	1	2	3	4	5		
Understanding of the cultures of students in the program.	DK	1	2	3	4	5		
Integrating the culture of students into the curriculum.	DK	1	2	3	4	5		
Familiarity with alternative assessment procedures for this population.	DK	1	2	3	4	5		
Developing I.E.P's that reflect the culture and language of students.	DK	1	2	3	4	5		
Fluency in the home language of students and families.	DK	1	2	3	4	5		

When working with students who come from multicultural environments, including those who come from homes where languages other than English or ASL are used, what other knowledge or skills should teachers working with students with visual, hearing, and multiple disabilities have? Please share your ideas:

Thank you for your cooperation!
Your prompt response will be highly appreciated.



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